

## IIMT College of Engineering

### POs, PEOs and PSOs.

#### PROGRAM OUTCOMES (PO's)

Students of this Program are expected to demonstrate:

- PO1 - Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the Solution of complex engineering problems.
- PO2 - Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3 - Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4 - Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5 - Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- PO6 - The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7 - Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8 - Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9 - Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10 - Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend

and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11 - Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader.

**PO12 - Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### **Program Educational Objectives (PEOs) -**

- Our graduates will have the ability to articulate their expertise, by solving problems of interest, through application of technology to meet the needs of employers.
- Our graduates will be capable of incorporating the impact of research, innovation and as well uphold the knowledge of ethical and moralities on their work.
- Our graduates will have effective communication skills, social responsibilities and will work cooperatively in interdisciplinary environments.
- Our graduates will have mathematical skills, continuing self-directed learning to sustain a lifelong career for their professional development.

### **Program Specific Objectives (PSOs)**

**PSO1:** Mechanical engineering graduates will be able to function in the area of design, modeling, simulation and analysis to realize physical systems /processes by creating knowledge base and facilities.

**PSO2:** Mechanical engineering graduates will be able to apply preceding knowledge of materials, testing and advanced manufacturing to realize physical systems /processes leading to research activities.

**PSO3:** Students will imbibe a holistic approach to manage industry-oriented projects in multidisciplinary environments.

